



FULBRIGHT & JAWORSKI L.L.P.

A REGISTERED LIMITED LIABILITY PARTNERSHIP
600 CONGRESS AVENUE, SUITE 2400
AUSTIN, TEXAS 78701-3271
WWW.FULBRIGHT.COM

STEVEN L. HIGHLANDER
PARTNER
SHIGHLANDER@FULBRIGHT.COM

DIRECT DIAL: (512) 536-3184
TELEPHONE: (512) 474-5201
FACSIMILE: (512) 536-4598

January 14, 2004

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS DD/Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:	
January 14, 2004	
Date	Steven L. Highlander

MS DD
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 10/721,839 entitled "NOVEL ANTIVIRAL ACTIVITIES OF PRIMATE THETA DEFENSINS AND MAMMALIAN CATHELICIDINS" – Wendy Maury et al.*
Our reference: IOWA:035USD1

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, Form PTO-1449, and references A1, A3-A7, C3, C9 and C22.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/IOWA:035USD1.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Steven L. Highlander
Reg. No. 37,642

SLH/kmv
Encl.: as noted



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Wendy Maury *et al.*

Serial No.: 10/721,839

Filed: November 25, 2003

For: NOVEL ANTIVIRAL ACTIVITIES OF
PRIMATE THETA DEFENSINS AND
MAMMALIAN CATHELICIDINS

Group Art Unit: Unknown

Examiner: Unknown

Atty. Dkt. No.: IOWA:035USD1

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:	
January 14, 2004	
Date	Steven L. Highlander

INFORMATION DISCLOSURE STATEMENT

MS DD

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be

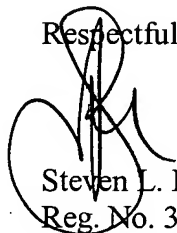
an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/IOWA:035USD1.

This application is a divisional application of Serial No. 10/060,102, filed January 29, 2002 and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) only copies of those documents not previously cited and submitted to the Patent and Trademark Office in prior application Serial No. 10/060,102 are enclosed for the convenience of the Examiner.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Steven L. Highlander
Reg. No. 37,642
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.
600 Congress Avenue, Suite 2400
Austin, Texas 78701
(512) 474-5201

Date: January 14, 2004

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

IOWA:035USD1

10/721,839

List of Patents and Publications for Applicant's

Applicant

Wendy Maury *et al.*

INFORMATION DISCLOSURE STATEMENT

Filing Date:

November 25, 2003

Group:

Unknown

(Use several sheets if necessary)

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	5,242,902	9/7/93	Murphy <i>et al.</i>	514	12	9/6/89
	A2	5,766,624	6/16/98	Janoff <i>et al.</i>	424	450	5/24/95
	A3	6,335,318	1/1/02	Selsted <i>et al.</i>	514	13	5/10/99
	A4	6,514,727	2/4/03	Selsted <i>et al.</i>	435	69.3	9/26/01
	A5	2003/0144184	7/31/03	Lehrer <i>et al.</i>	514	9	5/6/02
	A6	2003/0162718	8/28/03	Selsted <i>et al.</i>	514	14	12/5/02
	A7	2002/0115602	8/22/02	McCray <i>et al.</i>	514	12	6/1/01

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B3	WO 00/68265	11/16/00	PCT			
	B1	WO 01/12668	2/22/01	PCT			
	B2	WO 01/92309	12/6/01	PCT			
	B5	WO 02/085401	10/31/02	PCT			
	B4	WO 96/08508	3/21/96	PCT			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Andreu and Rivas, "Animal antimicrobial peptides: an overview," <i>Biopoly.</i> , 47:415-433, 1998.
	C2	Cole <i>et al.</i> , "Retrocyclin: a primate peptide that protects cells from infection by T- and M-tropic strains of HIV-1," <i>PNAS</i> , 99(4):1813-1818, 2002.
	C3	Co-pending U.S. Patent Application Serial Number 09/642,744 by Brian F. Tack <i>et al.</i> , filed August 18, 2000.

25372656.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

Atty. Docket No.
IOWA:035USD1Serial No.
10/721,839

List of Patents and Publications for Applicant's

Applicant
Wendy Maury *et al.*

INFORMATION DISCLOSURE STATEMENT

Filing Date:
November 25, 2003Group:
Unknown

(Use several sheets if necessary)

U.S. Patent Documents
*See Page 1*Foreign Patent Documents
*See Page 1*Other Art
*See Page 1***Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C4	<i>Fields Virology</i> , Fields <i>et al.</i> (eds.), Lippincott Williams & Wilkins, Philadelphia, PA, 1:46-47, 2:1767-1772, 1996.
	C5	Gallo <i>et al.</i> , "Identification of CRAMP, a cathelin-related antimicrobial peptide expressed in the embryonic and adult mouse," <i>J. Biol. Chem.</i> , 272:13088-13093, 1997.
	C6	Ganz and Lehrer, "Antimicrobial peptides of vertebrates," <i>Current Opinions Immun.</i> , 10:41-44, 1998.
	C7	Lehrer and Ganz, "Defensins of vertebrate animals," <i>Current Opinion in Immunology</i> , 14:96-102, 2002.
	C8	Leonova <i>et al.</i> , "Circular minidefensins and posttranslational generation of molecular diversity," <i>J. Leukoc. Biol.</i> , 70:461-464, 2001.
	C9	Munk <i>et al.</i> , "The theta-defensin, retrocyclin, inhibits HIV-1 entry," <i>AIDS Res. Hum. Retrovirus</i> , 19(10):875-881, 2003.
	C10	Nizet <i>et al.</i> , "Innate antimicrobial peptide protects the skin from invasive bacterial infection," <i>Nature</i> , 414:454-457, 2001.
	C11	Oren and Shai, "Mode of action of linear amphipathic α -helical antimicrobial peptides," <i>Biopolymers</i> , 47:451-463, 1998.
	C12	Risso <i>et al.</i> , "Leukocyte antimicrobial peptides: multifunctional effector molecules of innate immunity," <i>Journal of Leukocyte Biology</i> , 68:785-792, 2000.
	C13	Skerlavaj <i>et al.</i> , "SMAP-29: a potent antibacterial and antifungal peptide from sheep leukocytes," <i>FEBS Letters</i> , 463:58-62, 1999.
	C14	Stapleton <i>et al.</i> , "Anti-HIV activity of cathilicidins: Oxygen-independent antimicrobial peptides found in the secondary granules of phagocytosed," (Abstract), 39th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Fransisco, California, USA, 39:p.319, 1999.
	C15	Tam <i>et al.</i> , "Marked increase in membranolytic selectivity of novel cyclic tachyplesins constrained with an anitparallel two- β strand cystine knot framework," <i>Biochem. Biophys. Res. Communications</i> , 267:783-790, 2000.
	C16	Tang <i>et al.</i> , "A cyclic antimicrobial peptide produced in primate leukocytes by the ligation of two truncated α -defensins," <i>Science</i> , 286: 498-502, 1999.

25372656.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)

Atty. Docket No.

IOWA:035USD1

Serial No.

10/721,839

List of Patents and Publications for Applicant's

Applicant

Wendy Maury *et al.*

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:

November 25, 2003

Group:

Unknown

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 1

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C17	Tani <i>et al.</i> , "Defensins act as potent adjuvants that promote cellular and humoral immune responses in mice to a lymphoma idiotype and carrier antigens," <i>International Immunology</i> , 12(5):691-700, 2000.
	C18	Tossi <i>et al.</i> , "Design of synthetic antimicrobial peptides based on sequence analogy and amphipathicity," <i>Eur J. Biochem.</i> , 250:549-558, 1997.
	C19	Trabi <i>et al.</i> , "Three-dimensional structure of RTD-1, a cyclic antimicrobial defensin from Rhesus Macaque leukocytes," <i>Biochemistry</i> , 40:4211-4221, 2001.
	C20	Tran <i>et al.</i> , "Homodimeric θ -defensins from Rhesus macaque leukocytes," <i>J. Biol. Chem.</i> , 277:3079-3084, 2002.
	C21	Travis <i>et al.</i> , "Bactericidal activity of mammalian cathelicidin-derived peptides," <i>Infection and Immunity</i> , 68:2748-2755, 2000.
	C22	Zanetti <i>et al.</i> , "Cathelicidin peptides as candidates for a novel class of antimicrobials," <i>Curr. Pharm. Des.</i> , 8(9):779-793, 2002.
	C23	Zhang <i>et al.</i> , "Porcine antimicrobial peptides: New prospects for ancient molecules of host defense," <i>Veterinary Research</i> , 31:277-296, 2000.

25372656.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)